

I Claim:

1. A movable support, collapsible for storage and transport and able to be assembled and dis-assembled for use  
5 in carrying a load in a movable or fixed orientation, comprising:

a modular load support member comprising at least one axle carrying strut extending downward therefrom, a receiving  
10 member for receiving at least one of an adjustably removable handle tube and a clamping means;

said at least one axle carrying strut each having a lower end with an axle mounting means at said lower end, at  
15 least one axle extending through each said vertical strut, each said axle having at least one vehicle movement actuator of a pair of vehicle movement actuators attached at opposite sides of said cart; and,

20 a carrier attachable to said load support member, wherein when said carrier supports a load thereupon.

2. The movable support as in claim 1, wherein said receiving member comprises an upper spring pin aperture for  
25 receiving a push pin and said handle tube comprises a spring pin for secure interconnecting of said handle tube with said receiving member.

3. The movable support as in claim 2, wherein said  
30 receiving member comprises diametrically opposed transverse holes for allowing a through pin to extend therethrough.

4. The movable support as in claim 1, further comprising two pairs of axle load supports and four vehicle  
35 movement actuators.

5. The movable support as in claim 4, further comprising at least one cargo bin removable connected to said load support member.

5        6. The movable support as in claim 5, wherein, each of said at least one cargo bin comprises a top shell having a top outer surface and an opposing top inner surface;

         a bottom shell having a bottom outer surface  
10 and an opposing bottom inner surface;

         said top outer surface comprises a boss arrangement and said bottom outer surface comprises a recess arrangement corresponding with said boss arrangement for aligning a  
15 plurality of said cargo bins to be vertically stacked.

         7. The movable support as in claim 6, comprising at least one latch for removably connecting said top shell to said bottom shell, said at least one latch being optionally  
20 lockable.

         8. The movable support as in claim 6, wherein said cargo bin comprises a fiberglass material.

25        9. The movable support as in claim 6, further comprising at least one slidable drawer, anchored to and within said top shell of said cargo bin.

         10. The movable support as in claim 6,  
30 wherein said top inside surface and said bottom inside surface comprise a foam lining for limiting the movement of contents within said cargo bins.

         11. The movable support as in claim 6,  
35 wherein said bottom shell further comprises at least one removable container.

12. The movable support as in claim 6,  
further comprising a trailer hitch means.

5        13. The movable support as in claim 12, wherein said  
trailer hitch means comprises a pair of horizontally  
extending connecting bars, each with a spring pin locking  
mechanism, a transverse member and a hitch for attachment to  
a vehicle.

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14. The movable support as in claim 13, further  
comprising at least one strap for securing said at least one  
bin to said cart.

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15. The movable support as in claim 6, further  
comprising rotatable handles.

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16. The movable support as in claim 15, wherein said  
handles lock in an upper position for hauling said cart, and  
reverse to a lower position contacting the ground surface for  
operating as a kickstand.

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17. A movable support collapsible for storage and  
transport and expandable for use in carrying a load,  
comprising:

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a modular load support member comprising at least one  
axle carrying strut extending downward therefrom, a receiving  
member for receiving an adjustably removable handle tube and  
optionally a clamping means;

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said clamping means comprising an extrusion clamp  
rigidly attached to said modular load support member, a top  
clamp surface, an inside edge and an outside edge, said top  
clamp surface further comprising a groove formation aligned

with said inside edge and said outside edge for horizontally receiving a carrier;

5        said axle carrying struts each having a lower end with an axle mounting means at said lower end, at least one axle extending through each said vertical strut, each said axle having at least one vehicle movement actuator of a pair of vehicle movement actuators attached at opposite sides of said cart; and

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      a carrier attachable to said clamp, wherein when said carrier supports a load thereupon.

18. A movable support collapsible for storage and  
15 transport and expandable for use in carrying a load, comprising:

      a modular load support member comprising at least one axle carrying strut extending downward therefrom, a receiving  
20 member for receiving an adjustably removable handle tube and optionally a clamping means;

      said axle carrying struts each comprising a lower end with an axle mounting means at said lower end, at least one  
25 axle extending through each said vertical strut and a plurality of transverse holes for resisting impact;

      each said axle having at least one vehicle movement actuator of a pair of vehicle movement actuators attached at  
30 opposite sides of said cart; and

      a carrier attachable to said load support member, wherein when said carrier supports a load thereupon.

35        19. The movable support of claim 18,

wherein each said axle carrying strut further comprises a higher end having a second plurality of transverse holes for receiving at least one support rod.

5           20. The movable support of claim 17,  
          wherein each said axle carrying strut further comprises a pair of support trusses for increased load support, said trusses rigidly connecting said axle carrying support and said extrusion clamp.

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          21. A movable support collapsible for storage and transport and expandable for use in carrying a load, comprising:

15           a modular load support member comprising at least one axle carrying struts extending downward therefrom, a receiving member for receiving an adjustably removable handle member and optionally a clamping means;

20           said axle carrying strut having a lower end with an axle mounting means at said lower end, at least one axle extending through each said vertical strut, each said axle having at least one vehicle movement actuator of a pair of vehicle movement actuators attached at opposite sides of said cart;

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          a carrier attachable to said load support member, wherein when said carrier supports a load thereupon

          at least one said handle member for hauling said movable  
30 support , said handle member comprising a handle having a handle outer surface, a handle tube and removably adjustably connecting to said axle carrying strut.

          22. The movable support as in claim 21, said handle  
35 member being rotatable along the longitudinal axis of said

handle member and locking into an upright position for hauling said cart.

23. The movable support as in claim 21,  
5 wherein said handle member further comprising a kickstand receptacle for removably and adjustably supporting a kickstand, said kickstand receptacle rigidly connected to said handle outer surface and in substantially vertical orientation.

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24. The movable support as in claim 22,  
said handle further comprising a grip located coaxially to said handle tube and an outer grip parallel to said handle tube.

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25. The movable support as in claim 22,  
wherein said outer surface of said handle extends to the ground, said handle functioning as a kickstand, said handle member locking in at least two positions, said positions  
20 comprising an upward position for hauling said cart and a downward position for use as a kickstand.

26. The movable support as in any of claims 22, 24, or 25, wherein said handle member is locked in place with a  
25 spring pin.

27. A movable support collapsible for storage and transport and expandable for use in carrying a load, comprising:

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a modular load support member comprising at least one axle carrying struts extending downward therefrom, a receiving member for receiving an adjustably removable handle tube and optionally a clamping means;

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said axle carrying strut having a lower end with an axle mounting means at said lower end, at least one axle extending through each said vertical strut, each said axle having at least one vehicle movement actuator of a pair of vehicle movement actuators attached at opposite sides of said cart;

a carrier attachable to said load support member, wherein when said carrier supports a load thereupon

at least one handle member for hauling said movable support, said handle member comprising: a handle having a handle outer surface, a handle tube and removably adjustably connecting to said axle carrying strut;

said handle member being rotatable along the longitudinal axis of said handle member;

said handle comprising a grip located coaxially to said handle tube and an outer grip parallel to said handle tube in rigid connection with said coaxial grip, said outer surface of said handle extends to the ground, said handle member locking in at least two positions, said positions comprising an upward position for hauling said cart and a downward position for use as a kickstand;

said handle member locking in place with a spring pin.

28. A movable support as in claim 27, said positions further comprising a locking position wherein said handle member is substantially horizontal for stowing cart.

29. A movable support, collapsible for storage and transport and able to be assembled and dis-assembled for use in carrying a load, comprising:

a modular load support member comprising at least one axle carrying struts extending downward therefrom, a receiving member for receiving an adjustably removable handle tube and a clamping means or a rail, said rail optionally  
5 comprising a second clamping means;

said at least one axle carrying strut each having a lower end with an axle mounting means at said lower end, at least one axle extending through each said vertical strut,  
10 each said axle having at least one vehicle movement actuator of a pair of vehicle movement actuators attached at opposite sides of said cart; and

a carrier attachable to said load support member,  
15 wherein when said carrier supports a load thereupon.

30. A movable support, collapsible for storage and transport and able to be assembled and dis-assembled for use in carrying a load, comprising:

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at least two pairs of handle members each said handle member comprising a handle, a handle tube, and a grip;

a pair of horizontal tubes for receiving said pairs of  
25 handle members, each said horizontal tube comprising a first tube section, a second tube section and a joining section for attaching said first tube section to said second tube section;

30 said first tube section and said second tube section each having a connecting end and a handle attachment end, and a plurality of spring pin apertures for attachment of additional members;

35 said joining section comprising at least two spring pins, a first joining end and a second joining end, said



first joining end interlocking with a first connecting end of said first tube section, wherein a spring pin of said plurality of spring pins reversibly protrudes a spring pin aperture of said plurality of spring pin apertures located on  
5 said first tube section;

said second tube joining end interconnecting with said connecting end of said second tube section, wherein a second spring pin of said plurality of spring pins reversibly  
10 protrudes a second spring pin aperture located on said second tube section;

at least two pairs of clamping means, at least one pair in communication with said first horizontal tube and at least  
15 one pair in communication with said second horizontal tube;

at least two transverse support bars substantially perpendicular to said pair of horizontal support tubes and in communication with said clamping means, said transverse  
20 support bars connecting said first horizontal support tube to said second horizontal support tube through said clamping means;

a carrier in removable communication with said clamping  
25 means.

31. A movable support as in claim 30, said carrier being a stretcher.

30 32. A movable support as in claim 30, further comprising a second pair of clamping means in connection with an axle and a pair of vehicle movement actuators.

33. A movable support as in claim 30,  
35 wherein said pairs of handle members comprise single grips coaxial to said first or said second horizontal tube.

34. A movable support as in claim 30,  
wherein said pairs of handle members comprise a double grip  
handle, a first grip being coaxial to said first or said  
5 second horizontal member and a second grip parallel to said  
first grip and at a radial distance therefrom, wherein each  
said first grip and second grip are in rigid connection by a  
pair of parallel handle ends.

10 35. A movable support as in claim 34,  
wherein said handle reversibly locks in a downward position  
for use as a kickstand for supporting said cart.

36. A movable support as in claim 30,  
15 wherein:

a first spring pin aperture is located on  
each lateral side of said connecting ends of said first  
horizontal tube and said second horizontal tube; and

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a second spring pin aperture is located on each top side  
of said connecting ends of said first horizontal tube and  
said second horizontal tube, a distance farther from said  
connecting end than of said first spring pin aperture;

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37. A movable support, collapsible for storage and  
transport and able to be assembled and dis-assembled for use  
in carrying a load, comprising:

30 two pairs of handle members each said handle member  
comprising a handle, a handle tube, and a grip;

a pair of horizontal tubes for receiving said pairs of  
handle members, each said horizontal tube comprising a first  
35 tube section, a second tube section and a joining section for

attaching said first tube section to said second tube section;

5        said first tube section and said second tube section each having a connecting end and a handle attachment end, and a plurality of spring pin apertures for attachment of additional members;

10        said joining section comprising at least two spring pins, a first joining end and a second joining end, said first joining end interlocking with a first connecting end of said first tube section, wherein a spring pin of said plurality of spring pins reversibly protrudes a spring pin aperture of said plurality of spring pin apertures located on  
15        said first tube section;

      said second tube joining end interconnecting with said connecting end of said second tube section, wherein a second spring pin of said plurality of spring pins reversibly  
20        protrudes a second spring pin aperture located on said second tube section;

      at least two pairs of clamping means, at least one pair in communication with said first horizontal tube and at least  
25        one pair in communication with said second horizontal tube;

      at least two transverse support bars substantially perpendicular to said pair of horizontal support tubes and in communication with said clamping means, said transverse  
30        support bars connecting said first horizontal support tube to said second horizontal support tube through said clamping means;

      a carrier in removable communication with said clamping  
35        means, said carrier being a stretcher.

a first spring pin aperture is located on each lateral side of said connecting ends of said first horizontal tube and said second horizontal tube; and

5 a second spring pin aperture is located on each the top side of said connecting ends of said first horizontal tube and said second horizontal tube, a distance farther from said connecting end than of said first spring pin aperture;

10 38. A movable support, collapsible for storage and transport and able to be assembled and dis-assembled for use in carrying a load, comprising:

a pair of detachable horizontal support rods  
15 each with a first rod end and a second rod end;

at least one clamping means; and

a pair of kickstands, namely a front kickstand and a  
20 rear kickstand, adjustable in width and insertable through said clamping means and clamped onto each said end of each said horizontal support rod and extending substantially vertical therefrom.

25 39. A movable support as in claim 38, further comprising at least one lower support rod, wherein each end of said lower support rod are removably attachable to each of said kickstands.

30 40. A movable support as in claim 38, further comprising at least one pair of axle supporting struts in substantially vertical orientation and located between each said kickstand, a second clamping mean for removably attaching said axle supporting struts to said  
35 horizontal support tubes, an axle adjustable in length and

rotatably connected to said axle support struts, and at least one pair of vehicle movement actuators.

41. A movable support as in claim 38,  
5 wherein said kickstands comprise a substantially vertical left leg, substantially vertical right leg, and a kickstand connecting bar detachably extending horizontally between said left and right legs.

10 42. A movable support as in claim 41, said left and right legs each further comprise a lower end and a swivelable foot, insertable to said legs for allowing said legs to rotate freely.

15 43. A movable support as in claim 42, wherein said foot comprises a first spring pin, each said leg further comprises a first plurality of spring pin apertures in substantially vertical orientation, said foot removably insertable into each said leg such that said first spring pin enters a spring  
20 pin aperture of said first plurality of said spring pin apertures.

44. A movable support as in claim 43,  
wherein the interval of length between each spring pin  
25 aperture of said plurality of spring pin apertures is about one inch.

45. A movable support as in claim 42  
wherein said foot further comprises a screw end and said  
30 lower end of said leg comprises a receptacle for said screw end for fine adjustment of the height of said cart, the distance between the edge of said leg and the lower edge of said foot being a clearance distance.

35 46. A movable support as in claim 38, wherein

said clamping means comprises at least one clamp, reversible for accommodating a range of sizes of carriers, said clamp comprising:

5        a bottom surface, an opposing top surface, and a inside surface, a clamp front surface and an opposing clamp rear surface, said bottom surface comprising a plurality of grooves for optionally receiving said horizontal support tube, said top surface comprising at least one groove for  
10 optionally receiving said horizontal support tube;

        a first bore extending from said top surface to said bottom surface, for allowing a bolt to pass therethrough;

15        a rail aperture extending from said clamp front surface to said clamp rear surface for receiving said horizontal support tube and having a tightening knob for securely attaching said clamp to said horizontal support tube;

20        a bolt for tightening said rail to said clamp in securing said    to said clamp; and

        a top latch.

25        47. A moving support as in claim 46, wherein said first bore further comprises a flange and said bolt further comprises a fixed nut at the end of said bolt, for preventing the separation of said top latch and said bolt from said clamp.

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        48. A moving support as in claim 47, wherein the head of said bolt comprises a lever-shaped knob.

        49. A movable support as in claim 38, wherein said  
35 clamping means comprises at least one clamp having:

a lower portion having a first concavity for insertion above said horizontal support tubes and a second concavity for slidable and removable insertion of a carrier or a second carrier, a top surface and a guide boss for  
5 removable attachment of an upper portion;

said an upper portion having a third concavity for slidable and removable insertion of a carrier and a guide recess for removable attachment to said lower portion;  
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a first latch rigidly connected to said lower portion in communication with said first concavity for gripping said horizontal support tube securely; and

15 a second latch rigidly connected to said upper portion in communication with said third concavity for gripping said carrier securely.

50. A movable support as in claim 49, wherein said  
20 second carrier is a fluid catch.

51. A movable support as in claim 149, wherein said second latch comprises:

25 a lever latch for manual securing of said carrier, a jaw receiver, and a jaw for forming a frictional contact force between said latch and said carrier;

the diameter of said jaw effectively less than the  
30 inside diameter of said jaw receiver for allowing said jaw to accommodate a change in pitch of said carrier;

said jaw comprising a cylindrical portions and a contact portion comprising a concave surface for evenly contacting  
35 the convex surface of said carrier.

52. A movable support as in claim 49, wherein:

said carrier is a stretcher  
secured to said cart with said clamping means;

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said carrier having a front end and a rear end,  
said front end being secured to a pair of said upper portions  
of a first pair of said clamping means;

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said rear end of said carrier being secured to  
a pair of said lower portions of a second pair of said  
clamping means resulting in an elevation differential between  
said front end and said rear end of said second carrier; and

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said first and second pairs of said clamping  
means being located equidistant in length from said front end  
of said carrier, each secured to opposing horizontal support  
tubes.

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53. The movable support, as in claim 51, wherein said  
rear kickstand comprises said feet in a position of said  
clearance being a minimum, and said front kickstand comprises  
said feet in a position of said clearance being a maximum,  
resulting in maximum height differential between said front  
25 end of said carrier and said rear end of said carrier.

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54. A movable support as in claim 49, wherein said upper  
portion of said clamp further comprises an outside surface  
having a hinge for optionally removably attaching at least  
30 one rotatable accessory.

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55. A movable support as in claim 54, wherein said  
accessory is an instrument tray.

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56. A movable support as in claim 54, wherein said  
accessory is an arm support.



57. A movable support as in claim 54, wherein said accessory is an IV support.

5 58. A movable support as in claim 54, wherein said accessory comprises an insertable vertical rod and a component for insertion into said vertical rod.

59. A movable support as in claim 57, wherein said  
10 component is chosen from the group consisting of: an IV support, an instrument tray and a lighting device.

60. A movable support as in claim 54, wherein said accessory comprises a splitting attachment having an  
15 insertion pin for removable and rotatable communication with said hinge, and at least two hinges extending substantially vertically for additional components.

61. A movable support as in claim 54, wherein said  
20 accessory is a flexible electrical light.

62. A movable support as in claim 54, further comprising a electrical power storage component.

25 63. A method of deploying a portable cargo bin having a cabinet system, at least one latch and secured to a movable support, wherein:

said cargo bin comprising a top shell having a top outer  
30 surface, a first top side surface, a second top side surface, a top front surface, and a top rear surface;

a bottom shell having a bottom outer surface, a first  
bottom side surface, a second bottom side surface, a bottom  
35 front surface, and a bottom rear surface;

said method comprising the steps of:

- i) in the case of said movable support comprising at least one vehicle movement actuator, securing  
5 said at least one vehicle movement actuator to prevent movement,
- ii) applying force to tilt said collapsible cart about a first axis until a first rest position is  
10 reached, said force optionally applied to a pair of handles in connection with said movable support , and said first axis of tilt being the vertex formed of the intersection between said bottom outer surface and said bottom front surface;
- 15 iii) unlatching said straps;
- iv) applying force to tilt said collapsible cart about a second axis until a second rest position is reached, said second axis of tilt being the vertex formed of  
20 the intersection between said top outer surface and said top front surface;
- v) disengaging said at least one latch; and
- 25 vi) separating said top shell from bottom shell and said portable cart, allowing said to return to said first rest position or optionally to return fully to the initial standing position.

30 64. A method of transporting an injured person through a sequence of deployable medical facilities, wherein the mode of transportation is a movable support having two pairs of handles, said method comprising the steps of:

- a) assembling a movable support having at least

one pair of attached wheels, said movable support being one of at least a low level stretcher bearing movable support or a movable utility table;

b) transporting said injured person to a  
5 triage center where a second destination to be determined;

c) transporting said injured person from said triage to a pre-operative field hospital center;

d) in the case of said injured person being transported  
top an operating room, dis-assembling said wheels from said  
10 moving support and assembling a pair of kickstands in place  
of said wheels and in the case of said injured person on said  
low level movable support, transferring said injured person  
to a said utility table having said kickstands and dis-  
assembled said wheels;

e) rotating and locking said handles into a  
15 stored position for allowing necessary medical operations to  
take place;

f) optionally, attaching a fluid catch to said movable  
support;

g) in the case of said injured person being transported  
20 to a post-operative center, assembling said wheels to said  
movable support;

h) monitoring said injured person; and

i) in the case of recovery of said injured person,  
25 transporting said injured person to said triage center.

65. A method of transporting at least one injured person  
in an emergency situation to a medical facility, comprising  
the steps of:

a) sliding said at least one injured person onto a  
30 movable support having at least one pair of dis-assembling  
wheels, at least one pair of handle members, and a removable  
carrier, namely a stretcher;

b) transporting said at least one injured person to a  
35 wash area and optionally washing said injured person of  
contaminants; and

c) transporting said injured person to a medical facility, optionally disassembling said wheels from said movable support, assembling a pair of kickstands or rotating said handle member into a locked downward position in the  
5 case of said handle members being of length to extend to the ground, rotatable and lockable in a downward position.